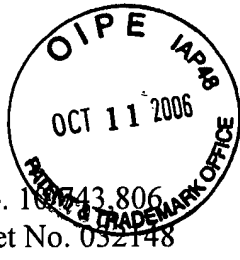


Response
Application No. 10,743,806
Attorney Docket No. 052148



REMARKS

Claims 1-15 are pending in the application.

Information Disclosure Statement

Applicants note that in the Office Action, dated July 11, 2006, the Examiner sent us an incorrect PTO-1449. The attached PTO-1449 is for Application S/N 10,744,066. The present Application S/N is 10,743,806.

Applicants request the Examiner to consider the Information Disclosure Statement ("IDS") filed December 24, 2003 and send us the signed PTO-1449 for this IDS.

Claim Rejections

A. Rejection based on Yoshinaga

Claims 1-5, 7, 10, 11-12 and 14 were rejected under 35 U.S.C. § 102(e) as being anticipated by **Yoshinaga** (U.S. Patent No. 6,061,038); claim 6 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Yoshinaga in view of **Sakaguchi** (U.S. Patent No. 6,448,951); and claims 8, 9, 13 and 15 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Yoshinaga in view of **Sato** (U.S. Patent No. 7,030,848). Favorable reconsideration is requested.

Applicants respectfully submit that Yoshinaga does not disclose:

adjusting an intensity of light incident on said display element and a light control variable in said display element, based on a detection result of the grayscale level

as recited in claim 14 and similarly in claim 15 ("adjusting an intensity of white light"), and "an adjusting unit" for performing this function as recited in claims 1 and 13.

Yoshinaga discloses a field-sequential type liquid crystal display device, which color signals of R, G and B are inputted into a minimum value detection circuit 14. The minimum value detection circuit 14 compares the brightness signals of R, G and B colors for each pixel and detects a minimum value W_{min} . Then the minimum value detection circuit 14 compares W_{min} values in an entire image in one frame to obtain a maximum value W_{max} of brightness levels of white color signals in the frame. And the minimum value detection circuit 14 supplies color signals R, G and B to a dynamic image/brightness detection circuit 15 to detect whether there is a motion of image relative to the image of the previous frame, or to detect a change of the maximum brightness, thereby determining the proportion S of the brightness level of the W signal of the W_{max} to be displayed in the White field.

The maximum value W_{max} in one frame is multiplied by the value of the proportion S and the resultant integral value ($W_{max} \times S$) is stored in a frame memory 21. Because this integral value becomes the maximum value of the brightness level of white color in the white field, the emission intensity of each of the R, G and B light sources is determined so that this value can be obtained.

Also, the white display signal corresponding to the White field given to the liquid crystal display panel for each pixel is controlled while the transmittance of the liquid crystal display panel 22 is changed so that the observer can see the W_{min} that is the original white brightness of the pixel.

Response
Application No. 10/743,806
Attorney Docket No. 032148

As stated above, Yoshinaga describes controlling the emission intensity of each of the R, G and B light sources, and controlling in each sub field the transmittance of the liquid crystal display panel. However, such control is not made on the basis of the detection results of the grayscale level of the display data of the present invention. According to Yoshinaga, the control is made on the basis of the above-described proportion S. The proportion S is determined on the basis of a motion of image relative to the image of the previous frame or a change of the maximum brightness, and hence, the proportion S is not determined on the basis of the grayscale levels of R, G and B.

FIG. 2 and FIG. 3 are graphs showing the emission intensity in the case when the proportion S is varied in similar grayscale level display frames (S=100% in FIG. 2, and S=50% in FIG. 3). Even in similar grayscale level display frames, the emission intensities are different between FIG. 2 and FIG 3. This proves that Yoshinaga does not control the emission intensity of light sources on the basis of the grayscale level.

Therefore, Yoshinaga does not disclose the feature “adjusting an intensity of light incident on said display element and a light control variable in said display element, based on a detection result of the grayscale level of display data” as recited in claims 1, 13, 14 and 15.

B. Rejection based on Thompson

Claims 1 and 9 were rejected under 35 U.S.C. § 102(b) as being anticipated by **Thompson** (U.S. Patent No. 5,589,852). Favorable reconsideration is requested.

Response
Application No. 10/743,806
Attorney Docket No. 032148

Applicants respectfully submit that Thompson does not disclose “an adjusting unit for adjusting an intensity of light incident on said display element and a light control variable in said display element, based on a detection result of said detecting unit” as recited in claim 1.

Thompson discloses a display device for displaying an image in a field sequential manner, by an image projection method using laser sources of three colors. However, Thompson does not teach detecting grayscale levels of display data. The Office Action takes the position that the “A/D converter 146” in FIG. 3 is a member for detecting grayscale levels. However, the “A/D converter 146” functions only for transforming analog color signals into digital signals.

Moreover, although the light intensities of colors are controlled, the control is not made based on grayscale levels. Further, Thompson controls the transmittance on display elements merely for realizing display in accordance with image data.

Therefore, Thompson fails to disclose the elements as recited in claim 1.

Accordingly, withdrawal of the rejections based on Yoshinaga and Thompson is hereby solicited.

In view of the above remarks, Applicants submit that the claims are in condition for allowance. Applicants request such action at an early date.

If the Examiner believes that this application is not now in condition for allowance, the Examiner is requested to contact Applicants’ undersigned attorney to arrange for an interview to expedite the disposition of this case.

Response

Application No. 10/743,806

Attorney Docket No. 032148

If this paper is not timely filed, Applicants respectfully petition for an appropriate extension of time. The fees for such an extension or any other fees that may be due with respect to this paper may be charged to Deposit Account No. 50-2866.

Respectfully submitted,

WESTERMAN, HATTORI, DANIELS & ADRIAN, LLP

A handwritten signature in black ink, appearing to read "A. G. Melick", is positioned above the printed name.

Andrew G. Melick

Attorney for Applicants

Registration No. 56,868

Telephone: (202) 822-1100

Facsimile: (202) 822-1111

AGM/tw